CLAIMS

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1. A transmission method used in a radio system that comprises at least one base station (100) and a number of subscriber terminals (201-203), at least two of which transmit access bursts to one and the same base station, the access burst activating between a subscriber terminal and a base station a connection that is established by a signal that is of a certain frequency and is sent in time slots, **characterized** in that when the subscriber terminal is commanded to send the base station a signal that employs a time slot and frequency already used by another subscriber terminal, the subscriber terminal is sent a command to adjust the transmission moment of the signal so that the base station receives the transmitted signals at different moments.

2. A method as claimed in claim 1, **characterized** in that the transmission moment is adjusted before an actual connection is established.

3. A method as claimed in claim 1, **characterized** in that a command is sent to delay the transmission moment of the signal.

4. A method as claimed in claim 1, **characterized** in that a command is sent to advance the transmission moment of the signal.

5. A method as claimed in claim 1, **characterized** in that a command is sent to delay the transmission moment of the signal by substantially at most an 11-bit period.

6. A method as claimed in claim 1, **characterized** in that a command is sent to advance the transmission moment of the signal by substantially at most an 11-bit period.

7. A method as claimed in claim 1, **characterized** in that the transmission moment of the signal is adjusted by at most the tail bits at the beginning of the burst and the guard period at the end of the burst.

8. A method as claimed in claim 1, **characterized** in that impulse responses are formed from the signals received by the base station, the impulse responses being defined to have a length of a minimum of substantially 3 bits.

9. A method as claimed in claim 1, **characterized** in that at least two signals of the same frequency are separated from each other, the signals having been received by the base station from one and the same time slot.

10. A method as claimed in claim 9, **characterized** in that

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the signals are separated by means of training sequences of signals received at different moments.

11. A method as claimed in claim 1, **characterized** in that the signals received by the base station are correlated and, on the basis of the correlation, the signal with the best quality and for example the highest energy is selected, and the signal is then used as a connection-establishing signal.

12. A method as claimed in claim 1, **characterized** in that the signals received by the base station are correlated by means of a training sequence, the signals formed on the basis of the correlation are placed in windows, and the summed energies of the impulse responses of the signals placed in the windows are compared.

13. A method as claimed in claim 1, **characterized** in that the subscriber terminal is commanded to change the signal transmission frequency, if the signal transmitted by the subscriber terminal interferes with a signal transmitted by another subscriber terminal.

14. A method as claimed in claim 1, **characterized** in that the frequencies used in different signals are predetermined.

15. A method as claimed in claim 1, **characterized** in that the signals are transmitted by a time division multiple access TDMA method.

16. A method as claimed in claim 1, **characterized** in that the method is particularly suited for radio systems used, for example, in offices.

17. A radio system comprising at least one base station (100) and a number of subscriber terminals (201-203), at least two of which transmit access bursts to one and the same base station, the access burst activating between a subscriber terminal and a base station a connection that is established by a signal of a certain frequency sent in time slots, **characterized** in that the radio system comprises

transmission means (101), which command the subscriber terminal to send the base station (100) a signal that employs a time slot and frequency already used by another subscriber terminal, and

adjustment means (205), which on the basis of the command sent by the transmission means (101) adjust the transmission moment of the signal to be transmitted to the base station (101) so that the base station (101) receives the transmitted signals at different moments.

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18. A radio system as claimed in claim 17, **characterized** in that the adjustment means (205) adjust the transmission moment before an actual connection is established.

19. A radio system as claimed in claim 17, **characterized** in that the transmission means (101) send a command that delays the transmission moment of the signal.

20. A radio system as claimed in claim 17, **characterized** in that the transmission means (101) send a command that advances the transmission moment of the signal.

21. A radio system as claimed in claim 17, **characterized** in that the transmission means (101) send a command that delays the transmission moment of the signal by substantially at most an 11-bit period.

22. A radio system as claimed in claim 17, **characterized** in that the transmission means (101) send a command that advances the transmission moment of the signal by substantially at most an 11-bit period.

23. A radio system as claimed in claim 17, **characterized** in that the adjustment means (205) adjust the transmission moment of the signal by at most the tail bits at the beginning of the burst and the guard period at the end of the burst.

24. A radio system as claimed in claim 17, **characterized** in that the adjustment means (205) are located in a subscriber terminal.

25. A radio system as claimed in claim 17, **characterized** in that the radio system comprises correlation means (102) for forming impulse responses from the signals received by the base station, the correlation means (102) defining the impulse responses so that they have a length of a minimum of substantially 3 bits.

26. A radio system as claimed in claim 17, **characterized** in that the radio system comprises correlation means (102) that, on the basis of the training sequences accompanying the signals transmitted by the subscriber terminal, separate from each other at least two signals that have the same frequency and have been received from the same time slot.

27. A radio system as claimed in claim 17, **characterized** in that the radio system comprises correlation means (102) that correlate the signals received by the base station and select, on the basis of the correlation, the signal with the best quality or for example the highest energy, and the signal is then used as an actual connection-establishing signal.

28. A radio system as claimed in claim 17, **characterized** in that the radio system comprises correlation means (102) that correlate the signals received by the base station by means of training sequences, and that place the signals formed on the basis of the correlation in windows, and that compare the summed energies of the impulse responses of the signals placed in the windows, whereby the interference signals and the subscriber terminal producing the interference signal can be detected.

29. A radio system as claimed in claim 17, **characterized** in that the radio system comprises correlation means (102) that correlate the signals received by the base station and detect, on the basis of the correlation, the signals interfering with the reception of the signal.

30. A radio system as claimed in claim 17, **characterized** in that the transmission means (101) command the subscriber terminal to change the signal transmission frequency, if the signal transmitted by the subscriber terminal interferes too much with a signal transmitted by another subscriber terminal.

31. A radio system as claimed in claim 17, **characterized** in that the radio system comprises storage means (103), which store information about the frequencies already used in different signals.

32. A radio system as claimed in claim 17, **characterized** in that a time division multiple access TDMA method is used in the radio system.

33. A radio system as claimed in claim 17, **characterized** in that the base station (100) of the radio system is a so-called office base station.